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September 19, 2006

Project Number GN1611

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USEPA Region I  
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Boston, Massachusetts 02114-2023

Mr. Paul Kulpa, Project Manager  
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Rhode Island Department of Environmental Management  
235 Promenade St.  
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Reference: CLEAN Contract No. N62472-03-D-0057  
Contract Task Order No. 008

Subject: Draft Action Memorandum, Soil Removal Actions  
Naval Station Newport, Newport RI

Dear Ms. Keckler and Mr. Kulpa:

As requested by the Navy, this letter transmits the draft action memorandum for soil removal actions at the Old Fire Fighting Training Area (OFFTA) at Naval Station Newport, in Newport Rhode Island. This document is provided for your review and/or comment.

This Action Memorandum documents the decision to 1) remove selected areas of soil contamination 2) remove underground structures found during the investigations conducted and 3) install a shoreline revetment to address sediment contamination and prevent further soil erosion at the site. These actions were discussed with you at the Tiger Team review meeting held April 13, 2006.

In accordance with the statement of work, copies of this material have been provided to those on the distribution list below for review and comment. If you have any questions, please do not hesitate to contact James Colter at (610) 595-0567.

Very truly yours,

Stephen S. Parker, LSP  
Project Manager

SSP/rp

Enclosure

- c: C. Frye, NAVFAC (2, w/encl.)  
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File GN1611-3.2 (w/o encl.) File GN1611-8.0 (w/encl.)

**ACTION MEMORANDUM****DATE:** September 30, 2006**FROM:** Captain Todd W. Malloy, Commanding Officer, Naval Station Newport**SUBJECT:** Non-Time Critical Removal Action  
Old Fire Fighting Training Area (Site 09)  
Naval Station Newport, Newport, Rhode Island**1. PURPOSE**

The purpose of this Action Memorandum is to document the decision by the U.S. Navy (Navy) to conduct a non time critical removal action (NTCRA) to remove contaminated subsurface soil and subsurface structures, and to replace the shoreline protection system at the Old Fire Fighting Training Area (OFFTA) Site, at Naval Station (NAVSTA) Newport, in Newport Rhode Island.

This action is to be taken to reduce potential risks to the public health, welfare and the environment posed by contaminants in the soils resulting from former use as a fire training area. Contaminated subsurface soil, building foundations, drain lines, and a suspected oil-water separator at OFFTA will be removed in this action. The existing shoreline protection material will be replaced with an engineered stone revetment to prevent further erosion of soil into Coasters Harbor.

This NTCRA is being conducted by the Navy under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Rhode Island Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (Remediation Regulations).

**2. NAVSTA NEWPORT BACKGROUND**

The NAVSTA Newport facility has been in use by the Navy since the era of the Civil War. During World Wars I and II, military activities at the facility increased significantly and the base provided housing and support for many servicemen. In subsequent peacetime years, use of on-site facilities was slowly phased out until Newport became the headquarters of the Commander Cruiser-Destroyer Force Atlantic in 1962. In April 1973, the Shore Establishment Realignment Program (SER) resulted in the reorganization of naval forces, and activity again declined. From 1974 to the present, research and development and training have been the primary activities at Newport. The base was renamed from the Naval Education and Training Center (NETC) to Naval Station Newport in 1998. The major commands currently located at NAVSTA Newport include the Naval Education and Training Center, Surface Warfare Officers School Command, Naval Undersea Warfare Center, and the Naval War College. Occupying approximately 1,063 acres, NAVSTA Newport is located along the western shoreline of Aquidneck Island for approximately 6 miles facing the east passage of Narragansett Bay. Portions of the facility are located in the City of Newport and the Towns of Middletown, Portsmouth, and Jamestown, Rhode Island.

**3. SITE DESCRIPTION**

This section presents an assessment of the environmental conditions at the OFFTA site. The site conditions have been evaluated through performance of a Source Removal Investigation (1997) a Remedial Investigation (RI) (2001), a Feasibility Study (FS) (2002) and Pre-Design Investigation Studies (2002 and 2004).

- a. Background. The OFFTA Site is located at the northern end of Coasters Harbor Island (see Figure 1), which is part of NAVSTA Newport. Coaster Harbor Island has a land area of 92 acres. Navy training facilities, including the Naval War College, occupy the portion of the island south of the OFFTA Site. The Site occupies approximately 5.5 acres and is bordered by Taylor Drive to the south and is surrounded by Coasters Harbor (part of Narragansett Bay) to the east, north, and west. Located along Taylor Drive, opposite the Site, are instructional facilities and asphalt parking lots. A small portion of

the parking area for the Surface Warfare Officers School was determined to be part of the Site due to the presence of oil contamination that appears to be contiguous to that present at OFFTA.

The OFFTA Site is generally flat, with base grade surface elevations ranging from 8 to 12 feet above mean low water (MLW). Until recently, the most prominent topographic features of the site were three mounds constructed into the landscape, with heights ranging from 4 to 20 feet above the surrounding area. These mounds, which contained contaminated soil and debris, were removed in a NTCRA conducted by the Navy from September 2004 through March 2005. The Site surface is predominantly soil and mown grass. A temporary gravel parking lot is located in the center portion of the site formerly occupied by a baseball field. A one-story concrete block building (Building 144), currently used for recruiting offices, is located along the southern side of the Site. With the exception of the parking areas, use of the OFFTA Site is not allowed; access to the Site is restricted by a chain link fence along its eastern, southern, and western sides.

The site is underlain by layers of fill, consisting of construction debris and sand and gravel; silty sand and gravel; peat; silt; and glacial till consisting of silt, sand and gravel. Overburden deposit thickness ranges from about 6 to more than 25 feet.

Groundwater is present between four and eight feet below ground surface. Groundwater elevation is influenced by tidal fluctuation, particularly near the shoreline. The groundwater beneath the site is classified by RIDEM as GB (not a potential current or future drinking water source).

A Navy fire fighting training facility occupied the Site from World War II until 1972. During the fire training operations, sailors ignited fuel oils in small structures at the site that simulated shipboard compartments, and then extinguished the fires. Figure 2 depicts the site and site features during the fire fighting training. These operations resulted in releases of fuel mixtures to the ground at the site. Upon closure of the fire fighting training facility, the training structures were reportedly demolished and the debris was buried in the mounds on the site, and then the entire area was covered with 1 to 2 feet of topsoil. The site was converted to a recreational area (Katy Field) in 1976 and used as such until its closure in 1998.

Currently the site is unused, with the exception of Building 144, occupied by recruiting offices. A replacement bridge is anticipated to be constructed to connect Taylor Drive to Coddington Point, and the associated project will impact approximately one acre on the easternmost portion of the site.

#### b. Removal Site Evaluation.

Extensive investigations have been conducted at the site including Remedial Investigation, Feasibility Study and Pre-design Investigations. This section summarizes the findings of these investigations.

Results indicate that past site activities have resulted in the release of both organic and inorganic contaminants. Contaminants that are believed to be site related include petroleum hydrocarbons, polycyclic aromatic hydrocarbon (PAH) compounds, and lead. Other contaminants found that are not believed to be site related include the metals antimony, arsenic, beryllium and manganese, and the pesticide dieldrin. In addition to the contaminated soil at the site, various types of debris, including concrete debris and intact foundations, bricks, asphalt, and remnant piping are present in the subsurface and along the shoreline.

Residual petroleum was observed in various locations, as oily soils bound within vadose zone soils and as a petroleum sheen on groundwater generated during excavation of test pits. The highest concentrations of petroleum exceed 30,000 mg/kg in soil which constitutes an exceedance of an upper concentration limit, in accordance with RIDEM Remediation Regulations (August 2004). Other soils near Coasters Harbor contain concentrations of TPH between 500 mg/kg and 10,000 mg/kg (refer to Figure 3).

PAHs were detected at their highest concentrations in subsurface soil and groundwater sample locations adjacent to Coasters Harbor. PAHs were also detected in shoreline sediment (intertidal), marine sediment (subtidal), and storm water samples. The highest concentrations of PAHs in marine sediment were detected at sampling stations nearest the shore in the vicinity of storm drain outfalls discharging at the shoreline of the site. Asphalt is present on the shoreline as debris and the shoreline shows signs of erosion in the western portion of the site. Concentrations of PAHs range from non-detect to over 90 mg/kg of total PAH in soil.

Metals were detected in soils and debris throughout the site. The presence of lead contamination in the site soil and fill possibly resulted from residual lead paint or leaded fuels used at the site. An average concentration of lead in fill at the site is calculated to be 888 mg/kg with a maximum concentration of 8250 mg/kg in fill (TtNUS 2004). Other metals of concern (including antimony, arsenic, beryllium and manganese) were found at comparable or higher concentrations in till at the site and tended to be present at higher concentrations in deeper soils, indicating that they are naturally occurring (TtNUS 2004).

In 2004, a manhole was uncovered under the central mound at the site. Upon research into the former structures at the site, it was determined that this manhole is likely part of the former drainage system and may be connected to a former oil water separator.

- c. Release or Threatened Release into the Environment of a Hazardous Substance, or Pollutant or Contaminant. The on-shore portion of the site contains an estimated 450 cubic yards of soil contaminated with petroleum in excess of 30,000 mg/kg, which exceeds RIDEM upper concentration limits for petroleum. In addition, wave erosion of the rubble shoreline protection material and the soil behind it may contribute to sediment contamination in Coasters Harbor. Finally, structures including a suspected oil-water separator, a former discharge pipe and three former building foundations were previously found at the site that may provide inputs as continuing sources of contamination.
- d. National Priorities List (NPL) Status. On November 21, 1989, NETC Newport was added to the National Priorities List (NPL) (54 FR 48184). On March 23, 1992 Site 09 (Fire Fighting Training Area) was recognized as an "Area of Contamination" (AOC) by the signing parties to the Federal Facilities Agreement (FFA) for NETC Newport. Therefore the Navy is required to take response actions pursuant to CERCLA and the terms of the agreement. Although NETC Newport has undergone change of name to NAVSTA Newport, NPL status is not affected.

#### 4. OTHER ACTIONS TO DATE

- a. Previous Actions. In 1998 the Navy conducted a removal evaluation at the OFFTA site to determine if there were still vessels or piping in place in the subsurface that could be contributing to the contamination at the site. Although remnant piping was found in the soils, these pipes were not connected and it was concluded that the fuel storage facilities had been removed during the redevelopment effort in the 1970s and no significant source of contamination remained in the subsurface soils that would warrant a source removal at that time. Areas under the debris mounds were not evaluated at that time due to the obstructions that the mounds posed.

In November and December 2003, the Navy conducted a Soil Pre-Design Investigation, which involved collection of additional subsurface information to better delineate the extent of contaminants in the mounds and subsurface soils on the OFFTA site. From this investigation, two reports were prepared: (1) the Mound Summary Report (March 2004) was prepared to help define the volume of soil and debris in the mounds requiring removal during the first removal action and (2) the Soil Pre-Design Investigation Report (April 2005) was prepared to help define the volume of soil and fill requiring removal under a second possible removal action for the on-shore portion of the OFFTA site.

The mound removal action was completed by the Navy at the OFFTA site in March 2005. Removal of the mounds was required to 1) confirm that no concentrated contaminant sources such as buried

drums remained at the site and, 2) allow access to contaminated soils beneath the mounds. No concentrated sources of contamination or vessels were encountered within the mounds. The mound removal consisted of excavation and off-site disposal of approximately 11,100 cubic yards of soil and debris contained in the three mounds at the site. Upon completion of this removal, a manhole was found which may be a part of the former drainage system used at the site during fire training operations.

b. Feasibility Study, Proposed Plan, and Tiger Team Optimization Review

A proposed plan for removal of soil at the site was prepared following the completion of the Feasibility study for the site (FS). The proposed plan included removal of all soil exceeding risk-based cleanup goals to achieve an unrestricted future use of the site.

An optimization review was conducted by a "Tiger Team" formed of Navy and EPA personnel in 2005 to determine if the proposed plan should be carried out. The review noted that the proposed plan would require removal of nearly all vadose zone soils at the site to achieve the unrestricted land use goal. It was also noted that following the completion of the FS report, the anticipated land use changed from unrestricted to a commercial/industrial with restricted passive recreational access (traverse paths). The Tiger Team recommended that the FS be revised to address the new land use and consider land use controls as part of the remedial action, and not restrict the remedial alternatives to an unrestricted land use goal.

However, it was further recognized that the soils exceeding the upper concentration limits required removal regardless of planned land use, and some structures known to exist (remnant outfall piping, the suspected oil – water separator, and three former building foundations) may be acting as continuing sources of contaminant releases. It was agreed by that Tiger Team that these targets should be addressed through a NTCRA.

Finally, it was noted that the shoreline protection at the site consists partially of fill including concrete and asphalt, and this material was not fully protective of erosion of the shoreline. The Tiger Team recommended that an engineered stone revetment be installed to prevent any erosion of soil containing debris, PAHs, and metals into the marine environment and to remove shoreline material that may provide contributing contamination.

Therefore, the Navy proposes implementation of the Tiger Team recommendations to conduct the following as a removal action:

- Remove soil with contaminant concentrations exceeding upper concentration limits for petroleum.
- Remove a manhole and suspected oil-water separator found underneath the central mound during removal of the mound.
- Remove three foundations found in the subsurface of the site during remedial investigations and predesign investigations between 1998 and 2004,
- Remove one 8-inch cast iron drainage pipe presumed to have discharged oily water and waste from the site during operations. Seek a second such drainage pipe shown on historic drawings and remove if found.
- Remove building debris from the shoreline, design and install an engineered stone revetment that will prevent erosion of soil containing low concentrations of PAH and lead contaminants in the soil to the sediments of Coasters Harbor.

- c. Current Actions. The Navy has initiated contracting actions to implement the Tiger Team recommendations as described above. The removal action as described in this Action Memorandum is anticipated to be conducted in 2007 and 2008.

## 5. STATE AND LOCAL AUTHORITIES ROLE

- a. State and Local Actions to Date. The site is located on property held by the Navy, and as such the Navy holds responsibility for removal actions, risk reduction and remediation of the site as needed. State and Local authorities have not undertaken any removal actions at the site, other than providing oversight of studies and actions conducted by the Navy. The State provides oversight of actions and review of documents for the site. The local community provides input on the Navy's action through participation in the Restoration Advisory Board, a group of community members who meet with Navy representatives periodically to discuss progress and provide input on Installation Restoration Program (IRP) sites.
- b. Potential for Continued State and Local Response. The ownership of the land at Coasters Harbor Island is not anticipated to change in the foreseeable future, and the Navy will retain responsibility for the site. Therefore, there is no anticipated need for state or local lead on removal or remedial actions for this site. The State of Rhode Island will continue to oversee the investigations and removal actions and the local community will continue to provide input on actions conducted at the site through the Restoration Advisory Board.

## 6. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

Potential threats to public health, welfare or the environment posed by site contaminants, and statutory and regulatory authorities that apply to the site are discussed in this section.

- a. Threats to Public Health or Welfare. Petroleum exceeds the RIDEM upper concentration limit of 30,000 mg/kg. There is a presumption that concentrations of petroleum in excess of 30,000 mg/kg pose a threat of health effects to humans, through the presence of associated PAHs. Although a risk evaluation for petroleum has not been conducted, there does not appear to be a current exposure route available to these contaminants, except to a construction worker excavating at the site.
- b. Threats to the Environment. Concentrations of contaminants present in the soil including PAHs, petroleum, and lead may contribute to sediment contamination in Coasters Harbor through erosion of those soils and may thus pose a risk of adverse effects to ecological receptors. In addition, structures and foundations found during the predesign investigation are present that may be providing a continuing source of contaminants to the site and surrounding marine sediments.
- c. Regulatory Authorities. Petroleum exceeds the RIDEM upper concentration limit of 30,000 mg/kg. The presence of this level of petroleum in soil at the site constitutes a violation of those regulations.

## 7. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response action selected in this Action memorandum, may present an elevated risk of endangerment to public health, or welfare, or the environment. The Navy has determined that this threat can be abated, minimized, or eliminated by undertaking a removal action.

## 8. PROPOSED ACTIONS AND ESTIMATED COSTS

This section describes the proposed removal action to mitigate the conditions cited in Section 6, above.

- a. Proposed Action. The proposed soil removal action consists of the excavation, transportation and off-site disposal of contaminated soil, foundations and other structures at the OFFTA Site. Following excavation, the removal areas will be backfilled, graded to the base grade elevation present across the Site, and a stone revetment will be constructed along the shoreline to protect it from erosion.

The removal of contaminated soil and structures was proposed to the public in July 2003. Comments on the proposed removal action have been received from the EPA, RIDEM, and the public and are provided in a responsiveness summary (Attachment C). The responsiveness summary provides the Navy's response to the public comments to the proposed plan for the removal action. The comments have been taken into consideration and do not require a revision to the proposed action. The major components of the proposed removal action and the basis for the proposal are provided below. Details of the actions and methods to perform the soil removal action will be described in two documents yet to be prepared: 1) the Removal Action Work Plan and 2) the Design for Stone Revetment. Both documents will be made available to the public through the RAB and to the Regulatory review parties for review and comment. The following paragraphs describe the major components of this proposed action.

RA Work Plan – A Removal Action (RA) work plan will be prepared and submitted to the regulatory parties for review as a draft and a draft final in order to solicit and address their concerns on the execution of the removal action. A final RA work plan will also be prepared and distributed to provide a plan for execution of the project. The RA work plan will describe the details of the removals, schedule, the action limits, sampling to be conducted, and limits of the removals.

Staging Area Setup – Prior to the start of excavation, staging areas, decontamination areas and site access controls will be set up. Fences will be opened as necessary for bringing equipment to the site then re-secured. Staging areas will be sized to accommodate the excavated soil.

Erosion Control – Erosion control measures will be set up to prevent runoff or erosion of soil and debris from the site and staging areas. In areas along the shoreline, erosion controls will be constructed to prevent storm, wave and wind erosion.

Soil, Fill, and Debris Removal – The removal action will consist of four components, as described below. Figure 3 shows the target excavation areas.

- Soil containing petroleum at concentrations above 30,000 mg/kg will be removed from the area where found. Based on extensive sampling conducted, this area is anticipated to cover 2116 square feet, extend to 8 feet below ground surface and involve the removal of an estimated 450 cubic yards of soil.
- Three foundations that were found during the removal action evaluation in 1998 will be excavated, demolished and removed from the subsurface. Any piping found leading to or from these foundations will be inspected to determine if remnant piping constitutes a continuing source of petroleum or PAH contamination to the site. The three foundation excavations are each presumed to involve an area of 2200 square feet, extend 6 feet below ground surface and involve removal of 380 cubic yards of soil and concrete.
- The manhole uncovered during the mound removal action will be opened, inspected, emptied, and then the associated structure will be excavated, demolished and removed. Any piping found leading to or from these foundations will be inspected to determine if remnant piping constitutes a continuing source of petroleum or PAH contamination to the site. The manhole excavation is anticipated to involve an area approximately 1300 square feet, extend 8 feet below ground surface and involve the removal of approximately 250 cubic yards of soil and concrete.
- The 8 inch cast iron drainage pipe found at the shoreline during the removal action evaluation in 1998 will be excavated, demolished and removed from the subsurface. Any connecting piping found will be inspected to determine if this remnant piping constitutes a continuing source of petroleum or PAH contamination to the site. The drain pipe excavation area is anticipated to impact an area 1400 square feet, extend to a depth of 8 feet below ground surface and involve the removal of approximately 250 cubic yards of soil and debris.

Stone Revetment – The existing shoreline protection material will be removed and replaced with an engineered stone revetment constructed along the shoreline to stabilize the shoreline and protect it from erosion.

- The design of the stone revetment will be presented as a 30% and a 90% for review by the regulatory parties, and a 100% design for distribution as a Navy contract bid package.
- The stone revetment will be designed and constructed to withstand a 100 year storm.
- The stone revetment will be constructed to cover the intertidal sediment which contains some amount of asphalt and fill, preventing further erosion of this fill into the subtidal area.
- The installation of the stone revetment will require excavation of some intertidal soil and sediment for the purposes of anchoring the revetment into the ground and protecting it from movement during storm events. The volume of material to be removed will be determined from a design-wave analysis, which is a calculation of how deep a seawall revetment needs to be anchored into the subsurface material to prevent washout. It is anticipated that the revetment may be anchored two to four feet below the existing ground surface, along a part of the shoreline.
- During construction, erosion control measures including “port-a-dam” and/or silt curtains will be set up to prevent runoff or erosion of soil and debris from the excavation and construction areas.
- The stone revetment will be designed and constructed to protect the eelgrass beds and shellfish beds to the extent possible that are present in close proximity to this construction area.

NAPL Controls During Excavation – Care will be taken during excavation to minimize the spread of NAPL to less contaminated areas. Any NAPL that accumulates on the water table during excavation will be captured and pumped as found present in the excavations, and or controlled by use of adsorbent pads or booms to prevent its migration.

Confirmation Sampling – Confirmation samples will be collected from the bottom and sides of excavations and analyzed for the removal action goal for TPH (30,000 mg/kg). to determine if the excavation is complete. Confirmation samples are not to be confused with post-excavation sampling.

Post-excavation Sampling – Upon reaching the limits of excavation, soils that will remain in place will be sampled and analyzed for site COCs to determine whether land-use restrictions, long-term monitoring, or other institutional controls are required after removal actions. Post – Excavation Samples are not to be confused with confirmation samples.

Staging of Material – Excavated soil and debris materials will be segregated and staged in covered stockpiles of like material (according to type and/or disposal facility) in the staging area. Materials may include soils, tree stumps, root balls, concrete, rebar, brick, wood, metal, asphalt and building rubble. Soil will be tested to determine the appropriate disposal facility.

Waste Disposal – Stockpiled materials will be sampled and analyzed for characterization purposes and to facilitate disposal. After profiling and manifesting, material will be shipped to the approved disposal facility.

Site Restoration – Excavated areas will be backfilled with clean fill and 4 inches of top soil. The excavated areas and other areas damaged during the removal action will be restored the original base grade elevation and seeded to prevent surface erosion.



- b. Contribution to Remedial Performance. The final remedy decision for the site has not been determined. The Tiger Team Optimization Review advised that the Feasibility Study completed in 2002 should be revised because 1) It was not accepted by the regulatory parties, and 2) because it limited the remedial alternatives evaluated to unrestricted land use, a limitation which is no longer applicable. However, the remedy decision as foreseen by the Tiger Team is anticipated to consist of a series of removal actions and land use controls appropriate for the planned land use at this site.

By removing soil exceeding upper concentration limits, the on-shore soil removal action will significantly reduce the potential human health risk posed by on-shore soils. Removing the suspected oil – water separator, the former drainage line, and the former building foundations, any associated sources of continuing contamination will be removed from the site. Removal of the asphalt and fill placed as shoreline protection and replacing that debris with an engineered stone revetment will reduce the potential for contaminant migration into the marine sediments via erosion of the soil and fill, thereby reducing the potential risk to off-shore ecological receptors.

The completion of this removal action will not hinder the performance of any anticipated action to be conducted as a part of the final remedy.

- c. Alternative Actions Considered. A range of alternative technologies were evaluated in the Feasibility Study completed in 2002. These were considered for the performance of the removal action, because it was noted that this action needs to be complimentary to the final remedy decision.

- no action - eliminated because it does not meet removal action goals;
- removal, ex-situ treatment and backfill – eliminated after detailed analysis due to extended time required to meet removal action goals and high cost for treatment;
- removal and off site disposal .

Cap and land use control alternatives were not evaluated in the FS report because there was an undetermined land use at the time.

Removal and disposal of target structures and contaminated soils exceeding upper concentration limits was selected as it is the only alternative that would be complimentary to any selected final remedy.

- d. Applicable or Relevant and Appropriate Requirements (ARARs). The removal action complies with the following federal and state ARARs:

- Coastal Zone Management Act (16 USC Parts 1451 et. seq.) – Actions must meet applicable coastal zone management requirements and protect resource areas.
- Floodplain Management (Executive Order 11988; 40 CFR Part 6, Appendix A) – Actions must preserve beneficial value of the floodplain.
- Clean Air Act (CAA), National Emission Standards for Hazardous Air Pollutants (NESHAPS) (USC 7411, 7412; 40 CFR Part 61) – Requirements for monitoring of air emissions must be met; activities will be carried out in a manner which will minimize potential air releases.
- Resource Conservation and Recovery Act (RCRA), Subtitle C - Standards for Hazardous Waste Facilities (42 USC 6291 et seq.) - Soils and debris must be tested, and if hazardous, handled and disposed according to standards.
- Clean Water Act (CWA), Section 402, National Pollutant Discharge Elimination System (NPDES) (33 USC 1342; 40 CFR Parts 122-125, 131) - Regulated discharges into surface waters must meet ambient water quality criteria.
- Rhode Island Remediation Regulations (CRIR 12-180-001, Section 8; DEM-DSR-01-93, as amended August 1996 and August 2004) – Removal will be directed by presence of soil exceeding upper concentration limits for petroleum (>30,000 mg/kg)
- Rhode Island Coastal Resources Management (RIGL 46-23-1 et seq.) – Actions must address applicable coastal resource management requirements.

- Rhode Island Clean Air Act - Fugitive Dust Control (RIGL 23-23 et seq.; CRIR 12-31-05) – Actions must take reasonable precaution to prevent particulate matter from becoming airborne.
- Rhode Island Clean Air Act - Emissions Detrimental to Persons or Property (RIGL 23-23 et seq.; CRIR 12-31-07) – Actions must prevent airborne emissions of contaminants that may be injurious to humans, plant or animal life or cause damage to property.
- Rhode Island Clean Air Act - Air Pollution Control (RIGL 23-23 et seq.; CRIR 12-31-09) - Removal action air emissions must be monitored and emissions controlled if necessary.
- Rhode Island Clean Air Act - Air Toxics (RIGL 23-23 et seq.; CRIR 12-31-22) - Removal action air emissions must be monitored to assess compliance and operation and maintenance activities carried out in to minimize potential air releases.
- Rhode Island Hazardous Waste Management Standards for Treatment, Storage, and Disposal Facilities (RIGL 23-19.1 et seq.; CRIR 12-030-003) – Soils and debris must be tested, and if hazardous, handled and disposed according to standards.

- f. Project Schedule. The following project schedule has been developed in accordance with the FFA, required times for completion of tasks and other constraints.

Milestone	Proposed Start Date	Proposed Completion Date
On-shore Removal Action Work Plan *	10/1/06	8/19/07
Soil Excavation and Removal	8/20/07	1/17/08
Removal Completion Report	1/17/08	9/4/08
Stone Revetment Design *	8/20/07	1/17/08
Stone Revetment Construction	6/1/08	11/1/08
Stone Revetment Completion Report (As-Built)	11/1/08	1/1/09

\*Tasked under CTO 65. All dates are subject to funding constraints

- g. Estimated Costs. The cost for the proposed removal action is currently estimated at approximately \$3.3M, to be conducted in two phases: The planning documents, design, and soil removal is estimated at \$1.3 M, and the stone revetment construction is estimated at approximately \$2M. The estimate for the stone revetment will be revised after the design is completed. There are no long-term operation, maintenance, or monitoring costs associated with this removal action.

## 9. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

If the removal action is not conducted, the contaminant concentrations in the soil may degrade, with bacterial action reducing the hydrocarbons in the soil. However, concentrations will likely decrease slowly over time. Shoreline and debris erosion will continue, possibly resulting in further sediment contamination in Coasters Harbor.

## 10. OUTSTANDING POLICY ISSUES

None identified at this time.

## 11. ENFORCEMENT

The action is being undertaken voluntarily by the Navy in accordance with the Federal Facilities Agreement for the NAVSTA Newport IRP. Regulatory agencies are anticipated to remain in an oversight role for the duration of the removal action, approving design documents, removal documentation and completion reports in order to continue to move toward a permanent remedy for the site.

## 12. RECOMMENDATION

The removal of the highly contaminated on-shore soil, and removal of the structures will reduce the risk of exposure of contaminants at the site. The removal of debris from the shoreline and installation of an

engineered stone revetment will reduce further erosion of contaminated soils from the bluff face to the sediments along the shoreline and will reduce migration of contaminants from the site soils into groundwater. Therefore, the Navy recommends the implementation of the proposed Soil Removal NTCRA.

Approvals:

NAVSTA Newport

\_\_\_\_\_  
CAPT Todd W. Malloy,  
Commanding Officer

Date: \_\_\_\_\_

## REFERENCES

TRC Environmental Corporation, 1992. Phase 1 Remedial Investigation Report, Naval Education and Training Center, Newport, Rhode Island. TRC, S. Windsor, Connecticut. January.

Brown and Root Environmental Corporation, 1998. Source Removal Evaluation Report, for the Old Fire Fighting Training Area, Naval Education and Training Center, Newport Rhode Island. Brown and Root Environmental, Wilmington, Massachusetts. January.

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Tetra Tech NUS, Inc., 2000. Draft Background Soil Investigation for the Old Fire Fighting Training Area, Naval Station Newport, Newport Rhode Island. Tetra Tech NUS, Inc., Wilmington Massachusetts. May.

SAIC and the University of Rhode Island, 2000. Marine Ecological Risk Assessment Report, Old Fire Fighting Training Area, Naval Station Newport, Newport Rhode Island. SAIC and URI Graduate School of Oceanography, Narragansett Rhode Island. April.

Tetra Tech NUS, Inc. 2001. Remedial Investigation Report, for the Old Fire Fighting Training Area, Naval Station Newport, Newport Rhode Island. Tetra Tech NUS, Inc., Wilmington Massachusetts. July.

Tetra Tech NUS, Inc. 2002. Feasibility Study Report for the Old Fire Fighting Training Area, Naval Station Newport, Newport Rhode Island. Tetra Tech NUS, Inc., Wilmington Massachusetts. September.

Tetra Tech NUS, Inc. 2004. Mound Summary Report for the Old Fire Fighting Training Area, Naval Station Newport, Newport Rhode Island. Tetra Tech NUS, Inc., Wilmington, Massachusetts. March.

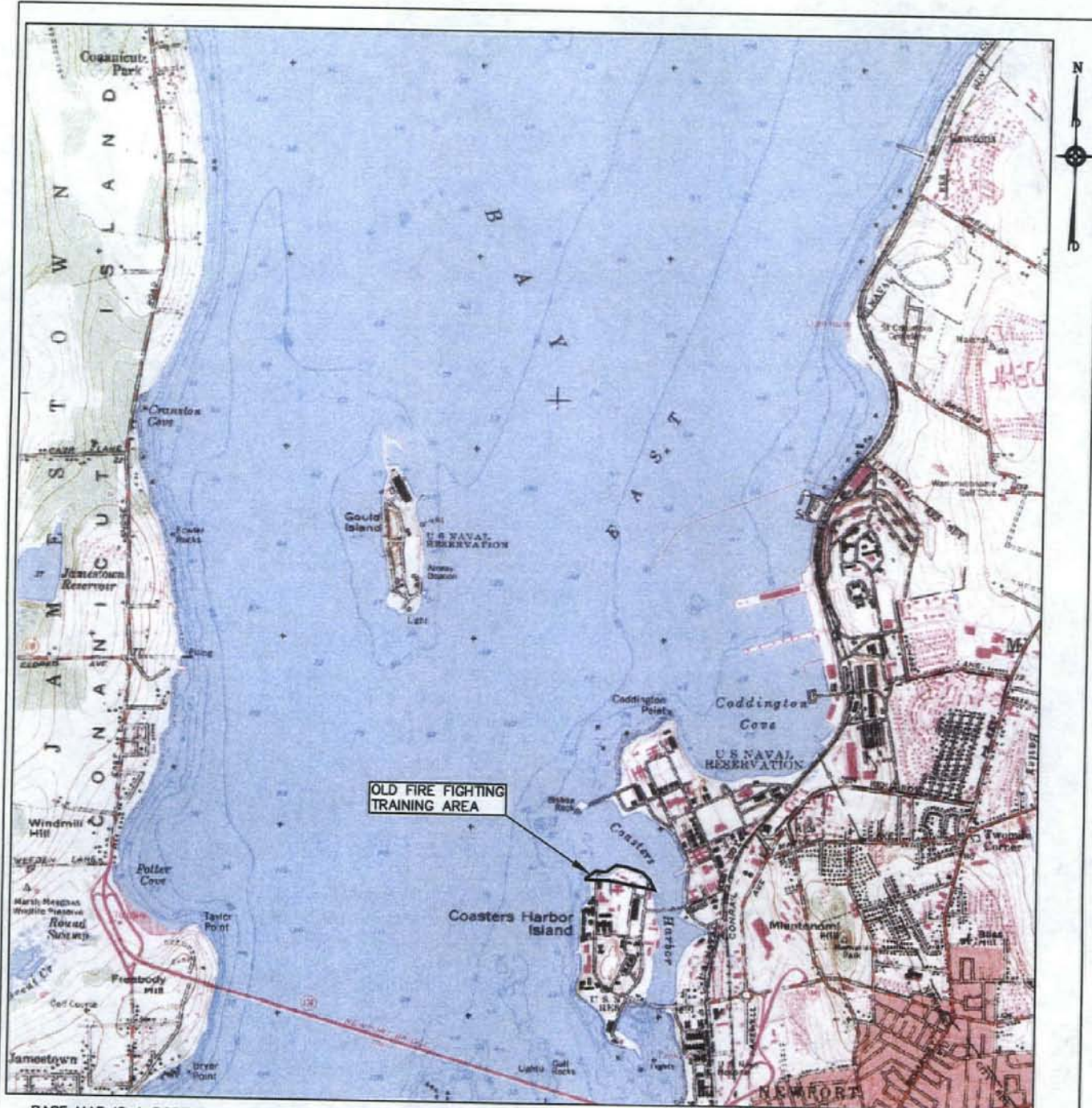
Tetra Tech NUS, Inc., 2005. Final Soil Pre-Design Investigation Report for the Old Fire Fighting Training Area, Naval Station Newport, Newport Rhode Island. Tetra Tech NUS, Inc., Wilmington Massachusetts. April.

**Attachment A – Figures**

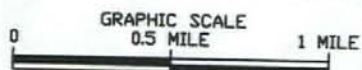
**Figure 1 – Locus**

**Figure 2 – Historical Features**

**Figure 3 –Removal Action Target Areas**



BASE MAP IS A PORTION OF THE FOLLOWING 7.5 X 15 MINUTE U.S.G.S. QUADRANGLE:  
PRUDENCE ISLAND, RHODE ISLAND, 1955, PHOTOREVISED 1970 AND 1975



QUADRANGLE LOCATION

### SITE LOCUS

FIGURE 1

### OLD FIRE FIGHTING TRAINING AREA

### NAVSTA NEWPORT – NEWPORT, RHODE ISLAND



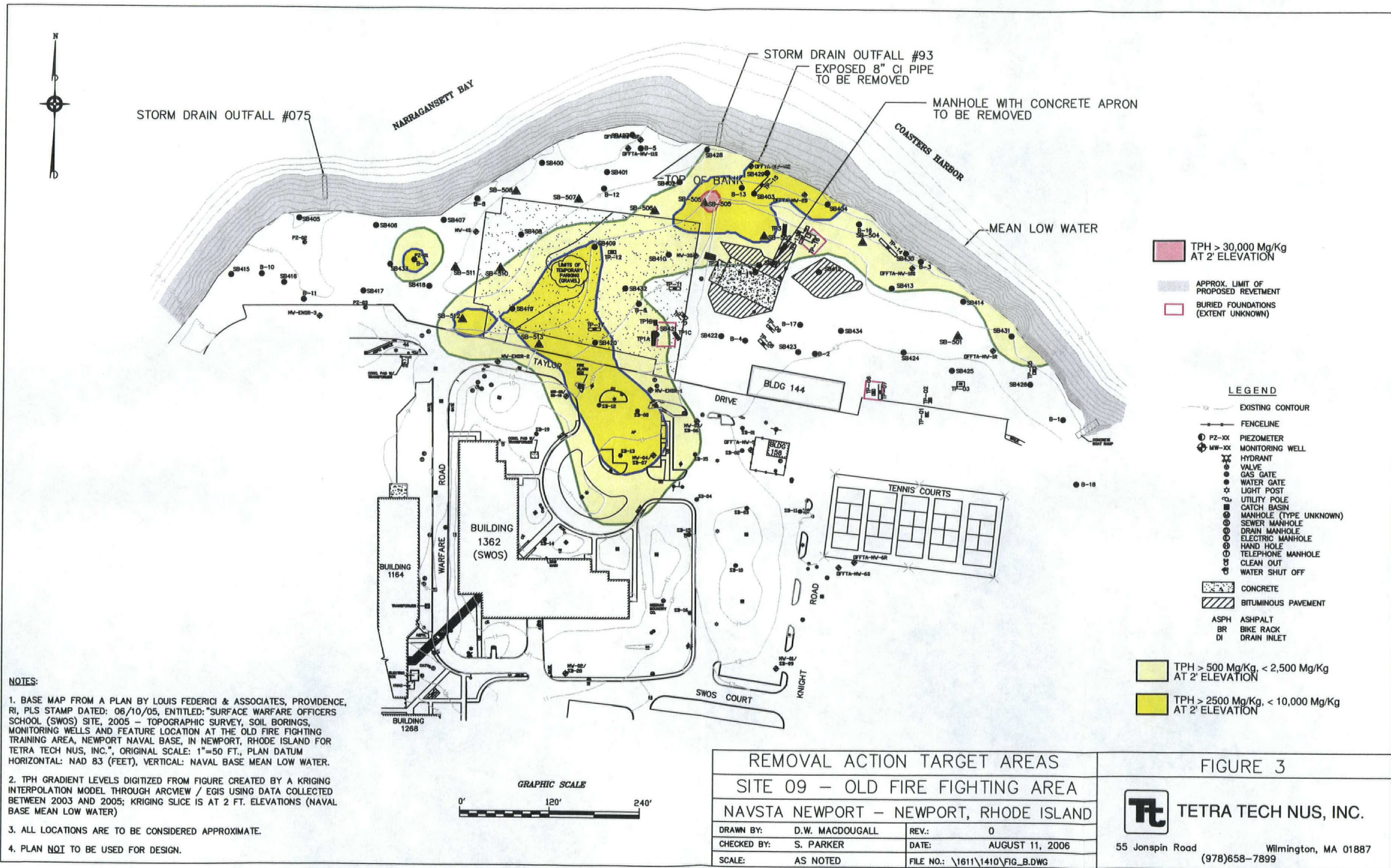
**TETRA TECH NUS, INC.**

DRAWN BY:	D.W. MACDOUGALL	REV.:	0
CHECKED BY:	S. PARKER	DATE:	AUGUST 11, 2006
SCALE:	AS NOTED	ACAD NAME:	\1611\1410\FIG_1.DWG

55 Jonspin Road

Wilmington, MA 01887  
(978)658-7899







**Attachment B**  
**Admin Record Index of Site Specific Documents**



**NAVAL STATION NEWPORT  
ADMINISTRATIVE RECORD FILE - SITE 09**

As Sent	ID No	Job No	Draw No	Site	Date	Doc Type	Description	Author
4-CD1	124	N5278	DISK 09-2	OFFTA	8/1/1994	REPORT	OFFTA REMEDIAL INVESTIGATION REPORT, DRAFT FINAL	TRC
4-CD1	125	N5278	DISK 09-6	OFFTA	8/1/1994	REPORT	OFFTA HUMAN HEALTH RISK ASSESSMENT, DRAFT FINAL TEXT AND TABLES	TRC
4-CD1	126	N5278	DISK 09-1	OFFTA	8/1/1994	REPORT	OFFTA REMEDIAL INVESTIGATION REPORT, DRAFT FINAL, TEXT AND TABLES	TRC
4-CD1	127	N5278	DISK 09-8	OFFTA	10/1/1994	REPORT	OFFTA ECOLOGICAL RISK ASSESSMENT, DRAFT FINAL, TEXT AND TABLES	TRC
4-CD1	128	N5278	DISK 09-11	OFFTA	11/1/1994	REPORT	OFFTA FEASIBILITY STUDY, DRAFT, TABLES AND TABLES	TRC
4-CD1	484	N7578	W5297176F	OFFTA	1/1/1998	REPORT	SOURCE AREA REMOVAL EVALUATION	BROWN AND
4-CD1	133	N5278	44415	OFFTA	11/20/1998	LETTER	RIDEM CONCURRENCE ON 0-1 FOOT SAMPLE INTERVAL FOR SURFACE SOILS AT KATY FIELD	NAVY
4-CD1	134	NA	ELDN 10119	OFFTA	11/23/1998	MINUTES	PROCEEDINGS AT THE FIRST PUBLIC HEARING, KATY FIELD AND OFFTA	IRONS AND ASSOC
4-CD1	136	NA	ELDN 10103	OFFTA	1/25/1999	MINUTES	PROCEEDINGS AT THE SECOND PUBLIC HEARING, KATY FIELD AND OFFTA	IRONS AND ASSOC
4-CD1	138	N5278	45852	OFFTA	3/16/1999	LETTER	EPA ASSESSMENT OF DATA NEEDED TO COMPLETE THE OFFTA RI	USEPA
4-CD1	139	N5278	47589	OFFTA	5/10/1999	REPORT	HUMAN HEALTH RISK ASSESSMENT REPORT, SOIL AND SEDIMENT OFFTA SITE	TTNUS
4-CD1	140	N5278	47171	OFFTA	6/14/1999	LETTER	EPA COMMENTS ON THE DRAFT RISK ASSESSMENT REPORT FOR KATY FIELD	USEPA
4-CD1	141	N5278	47176	OFFTA	6/18/1999	LETTER	RIDEM COMMENTS ON THE DRAFT RISK ASSESSMENT REPORT FOR KATY FIELD	RIDEM
4-CD1	142	N5278	47232	OFFTA	8/3/1999	LETTER	RESPONSE TO RIDEM COMMENTS ON THE DRAFT HUMAN HEALTH RISK ASSESSMENT, KATY FIELD	TTNUS
4-CD1	143	N5278	47233	OFFTA	8/3/1999	LETTER	RESPONSE TO EPA COMMENTS ON THE DRAFT HUMAN HEALTH RISK ASSESSMENT, KATY FIELD	TTNUS
4-CD1	144	N5278	47798	OFFTA	8/30/1999	LETTER	EPA REBUTTAL TO NAVYS RESPONSE TO COMMENTS ON THE DRAFT RISK ASSESSMENT REPORT FOR KATY FIELD	USEPA
4-CD1	148	N5278	53172	OFFTA	6/22/2000	LETTER	HUMAN HEALTH RISK ASSESSMENT EXPOSURE PARAMETER TABLES	TTNUS
4-CD1	149	N5278	54331	OFFTA	7/12/2000	LETTER	RIDEM COMMENTS TO THE HUMAN HEALTH RISK ASSESSMENT EXPOSURE PARAMETERS	RIDEM
4-CD1	152	N5278	54332	OFFTA	8/16/2000	LETTER	RESPONSE TO RIDEM COMMENTS ON THE PROPOSED HHRA EXPOSURE PARAMETERS FOR OFFTA	TTNUS
4-CD1	154	N5278	56132	OFFTA	11/20/2000	LETTER	EPA COMMENTS TO THE DRAFT FINAL RI REPORT FOR OFFTA	USEPA
4-CD1	155	N5278	56153	OFFTA	12/5/2000	LETTER	RIDEM COMMENTS TO THE DRAFT FINAL PHASE 3 RI REPORT FOR OFFTA	RIDEM
4-CD1	156	N5278	55601	OFFTA	12/20/2000	LETTER	RESPONSES TO COMMENTS TO REVISED DRAFT FINAL RI, OFFTA	TTNUS

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AR Serial	ID No.	Job No.	Doc. No.	Site	Date	Doc. Type	Description	Author
4-CD1	157	N5278	56169	OFFTA	1/16/2001	LETTER	EPA REBUTTAL TO NAVY RESPONSE TO EPA COMMENTS ON THE DRAFT FINAL RI REPORT, OFFTA	USEPA
4-CD1	160	N5278	56181	OFFTA	2/20/2001	LETTER	RESPONSE TO ADDITIONAL EPA COMMENTS TO THE REVISED DRAFT FINAL RI, OFFTA	TTNUS
4-CD1	163	N5278	56263	OFFTA	3/15/2001	LETTER	EPA REBUTTAL ON NAVY RESPONSE TO ADDITIONAL EPA COMMENTS ON THE DRAFT FINAL RI REPORT, OFFTA	USEPA
4-CD1	165	N5278	56286	OFFTA	4/11/2001	LETTER	NAVY RESPONSE TO EPA REBUTTAL ON RESPONSE TO ADDITIONAL COMMENTS ON THE DRAFT FINAL RI, OFFTA	TTNUS
4-CD1	167	N5278	W5200234F	OFFTA	7/1/2001	REPORT	FINAL REMEDIAL INVESTIGATION REPORT FOR OFFTA	TTNUS
4-CD1	130	N1703	28778	OFFTA	10/16/1995	LETTER	MEMO OF UNDERSTANDING, ECORISK WORK PLAN	TTNUS
4-CD1	131	N1703	38155	OFFTA	4/29/1996	PLAN	ECORISK WORK PLAN ADDENDUM C, DRAFT FINAL, OFFTA	URIGSO
4-CD1	132	N7397	NA	OFFTA	12/18/1998	REPORT	TECHNICAL SUPPORT DOCUMENT (DATA) FOR THE ECOLOGICAL RISK ASSESSMENT, OFFTA	TTNUS
4-CD1	135	N7397	44480	OFFTA	1/20/1999	LETTER	OFFTA ECORISK DATA REVISIONS	TTNUS
4-CD1	137	N7397	44486	OFFTA	2/16/1999	LETTER	OFFTA ECORISK DATA AMEND 02	TTNUS
4-CD1	145	N7397	48429	OFFTA	9/30/1999	LETTER	RESPONSE TO COMMENTS FOR THE DRAFT FINAL ECOLOGICAL RISK ASSESSMENT, OFFTA	TTNUS
4-CD1	146	N7397	52607	OFFTA	4/28/2000	REPORT	FINAL ECOLOGICAL RISK ASSESSMENT REPORT/TECHNICAL REPORT AND REVISED APPENDIX D	SAIC / URIGSO
4-CD1	162	N7397	56183	OFFTA	3/1/2001	LETTER	ERRATA SHEETS FOR FINAL ERA OFFTA	SAIC
4-CD1	147	N5278	52740	OFFTA	5/22/2000	LETTER	EPA COMMENTS TO THE BACKGROUND SOIL INVESTIGATION REPORT	USEPA
4-CD1	150	N5278	53686	OFFTA	7/13/2000	LETTER	RESPONSE TO RIDEM COMMENTS ON THE DRAFT BACKGROUND SOIL INVESTIGATION REPORT FOR OFFTA	TTNUS
4-CD1	151	N5278	53687	OFFTA	7/13/2000	LETTER	RESPONSE TO EPA COMMENTS ON THE DRAFT BACKGROUND SOIL INVESTIGATION REPORT FOR OFFTA	TTNUS
4-CD1	153	N5278	54340	OFFTA	8/23/2000	REPORT	FINAL BACKGROUND SOIL INVESTIGATION REPORT, OFFTA	TTNUS
4-CD1	159	N5278	56266	OFFTA	2/8/2001	LETTER	NAVY COMMENTS TO RIDEM PROPOSED STATISTICAL EVALUATION OF BACKGROUND SAMPLING, OFFTA	NAVY
4-CD1	158	N5278	56152	OFFTA	2/7/2001	LETTER	EPA COMMENTS TO THE PROPOSED SEDIMENT PRG DEVELOPMENT FOR OFFTA	USEPA
4-CD1	161	N5278	56179	OFFTA	2/22/2001	LETTER	NAVY RESPONSE TO EPA PROPOSED PRG DEVELOPMENT ALTERNATIVES, OFFTA MARINE SEDIMENT	TTNUS
4-CD1	164	N7397	56112	OFFTA	3/28/2001	LETTER	RESPONSE TO COMMENTS, PROPOSED PRG DEVELOPMENT, OFFTA	TTNUS

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ARI Serial	IDNA	JOB No.	Env. No.	Env.	Date	Doc. Type	Description	Author
4-CD1	166	NA	EPA_EMAIL_04 2301	OFFTA	4/23/2001	LETTER	COMMENTS TO TTNUS CORRESPONDENCE ON PRG DEVELOPMENT DOCUMENT, OFFTA	EPA
4-CD1	432	N7397	67487	OFFTA	11/9/2001	REPORT	DRAFT FINAL PRGs - MARINE SEDIMENT	TTNUS
4-CD1	431	N7397	59250	OFFTA	12/3/2001	LETTER	EPA COMMENTS TO THE DRAFT FINAL PRGS, MARINE SEDIMENT	EPA
4-CD1	430	N7397	C-NAVY-01 1522W	OFFTA	12/5/2001	LETTER	Ti RESPONSE TO COMMENTS, DRAFT FINAL SEDIMENT PRGS	TTNUS
4-CD1	429	N7397	C-NAVY-12-01 1542W	OFFTA	12/21/2001	LETTER	ADDITIONAL Ti RESPONSE TO COMMENTS	TTNUS
4-CD1	428	N7397	60942	OFFTA	3/5/2002	LETTER	RIDEM COMMENTS, DRAFT FINAL PRGS, MARINE SEDIMENT	RIDEM
4-CD1	427	N7397	C-NAVY-03-02 1560W	OFFTA	3/27/2002	LETTER	RESPONSE TO COMMENTS, DRAFT FINAL SEDIMENT PRGS	TTNUS
4-CD1	402	N7397	67479	OFFTA		REPORT	FINAL PRGs - MARINE SEDIMENT PRGS	TTNUS
4-CD1	468	N4152	PUB062101	OFFTA	6/21/2001	LETTER	AQUIDNECK ISLAND CITIZENS ADVISORY BOARD LTR ON DRAFT FS	AICAB
4-CD1	408	N7538	W5201240DF	OFFTA	3/1/2002	REPORT	DRAFT FINAL FS - FOR SOIL AND MARINE SEDIMENT	TTNUS
4-CD1	401	N7538	60961	OFFTA	4/4/2002	LETTER	NOAA COMMENTS TO THE DRAFT FINAL FS	NOAA
4-CD1	406	N7538	C-NAVY-04-02 1563W	OFFTA	4/5/2002	REPORT	SUPPLEMENTAL INFORMATION FOR FS (APPENDIX D)	TTNUS
4-CD1	492	N4152	60951	OFFTA	4/9/2002	E-MAIL	RESPONSES TO COMMENTS FROM RIDEM, CONF CALL 4/4/02	TTNUS
4-CD1	387	N7538	62038	OFFTA	4/25/2002	LETTER	EPA COMMENTS TO THE DRAFT FINAL FS	EPA
4-CD1	386	N7538	62044	OFFTA	4/26/2002	LETTER	RIDEM COMMENTS TO THE DRAFT FINAL FS	RIDEM
4-CD1	426	N4152	C-NAVY-06-02 1567W	OFFTA	6/5/2002	LETTER	SUMMARY OF DISCUSSION - HABITATS VS. DREDGING ACTIONS	TTNUS
4-CD1	385	N7538	C-NAVY-06-02 1570	OFFTA	6/13/2002	LETTER	RESPONSE TO COMMENTS, DRAFT FINAL FS	TTNUS
4-CD1	425	N4152	61976	OFFTA	6/17/2002	LETTER	EPA COMMENTS ON NOTES FROM DREDGING OPTIONS (OFFTA)	EPA
4-CD1	384	N7538	61990	OFFTA	7/11/2002	LETTER	ADDITIONAL EPA COMMENTS, DRAFT FINAL FS	EPA
4-CD1	400	N7538	61984	OFFTA	8/28/2002	LETTER	NAVY RESPONSE TO COMMENTS, DRAFT FINAL FS	NAVY
4-CD1	407	N4152	W5201240F	OFFTA	9/1/2002	REPORT	FINAL FEASIBILITY STUDY	TTNUS
4-CD1	405	N4152	62580	OFFTA	9/24/2002	LETTER	NOAA COMMENTS TO THE FINAL FS	NOAA
4-CD2	394	N4152	62576	OFFTA	10/8/2002	LETTER	EPA COMMENTS (DOESN'T ACCEPT FINAL FS)	EPA
4-CD2	518	N4152	W5201254D	OFFTA	10/24/2001	PLAN	DRAFT WORK PLAN - SEDIMENT PRE-DESIGN INVESTIGATION AND ADDENDA FOR GROUNDWATER SAMPLING AND PHASE 2 SEDIMENT INVESTIGATIONS	TTNUS
4-CD2	404	N4152	59211	OFFTA	11/5/2001	LETTER	EPA COMMENTS ON THE DRAFT WORK PLAN FOR SEDIMENT PDI	EPA
4-CD2	403	N4152	59255	OFFTA	11/8/2001	LETTER	EPA RESPONSE TO COMMENTS ON THE WORK PLAN FOR SEDIMENT PDI	EPA
4-CD2	485	N4152	W5202265D	OFFTA	2/1/2002	REPORT	DRAFT TECHNICAL MEMORANDUM - SEDIMENT PRE-DESIGN INVESTIGATION	TTNUS

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AF Sect	Doc No.	DOB No.	Doc No.	Site	Date	Doc Type	Description	Author
4-CD2	398	N4152	62033	OFFTA	3/4/2002	LETTER	NOAA COMMENTS ON THE SEDIMENT PREDESIGN INVESTIGATION	NOAA
4-CD2	397	N4152	60960	OFFTA	4/8/2002	LETTER	EPA COMMENTS ON THE DRAFT SEDIMENT PREDESIGN INVESTIGATION	EPA
4-CD2	396	N4152	C-NAVY-05-02 1566	OFFTA	5/15/2002	LETTER	RESPONSE TO COMMENTS, DRAFT SEDIMENT PDI REPORT	TTNUS
4-CD2	395	N4152	62123	OFFTA	6/10/2002	LETTER	ADDITIONAL EPA COMMENTS ON THE DRAFT SEDIMENT PDI REPORT	EPA
4-CD2	409	N4152	W5202275D	OFFTA	9/27/2002	REPORT	DRAFT PHASE II SEDIMENT PRE-DESIGN INVESTIGATION	TTNUS
4-CD2	393	N4152	62575	OFFTA	10/8/2002	LETTER	EPA COMMENTS ON THE DRAFT PHASE II PDI REPORT	EPA
4-CD2	392	N4152	64629	OFFTA	11/15/2002	LETTER	RIDEM COMMENTS ON THE DRAFT PHASE II PDI REPORT	RIDEM
4-CD2	498	N4152	68612	OFFTA	1/30/2004	REPORT	EPA REPORT ON SEDIMENT SAMPLING CONDUCTED BY EPA, SITES 09 AND 17	EPA
4-CD2	412	N7538	W5201257D	OFFTA	12/1/2001	REPORT	DRAFT GROUNDWATER RISK EVALUATION	TTNUS
4-CD2	445	N7538	62106	OFFTA	1/17/2002	LETTER	EPA COMMENTS TO THE DRAFT GW RISK EVALUATION	EPA
4-CD2	421	N7538	C-NAVY-03-02 1554	OFFTA	3/1/2002	LETTER	RESPONSE TO COMMENTS, DRAFT GW RISK EVALUATION	TTNUS
4-CD2	399	N7538	W5201257DF	OFFTA	3/1/2002	REPORT	DRAFT FINAL GROUNDWATER RISK EVALUATION	TTNUS
4-CD2	490	N4152	C-NAVY-09-02 1578W	OFFTA	9/5/2002	PLAN	DRAFT PROPOSED REMEDIAL ACTION PLAN	NAVY
4-CD2	489	N4152	67476	OFFTA	10/7/2002	LETTER	RIDEM COMMENTS ON THE DRAFT PRAP	RIDEM
4-CD2	391	N4152	62577	OFFTA	10/8/2002	LETTER	EPA COMMENTS ON THE DRAFT PRAP	EPA
4-CD2	438	N4152	C-NAVY-11-02 1598W	OFFTA	11/4/2002	LETTER	RESPONSE TO COMMENTS ON THE DRAFT PRAP	TTNUS
4-CD2	437	N4152	64610	OFFTA	11/18/2002	LETTER	RAB COMMENTS ON THE DRAFT PRAP	RAB
4-CD2	436	N4152	64603	OFFTA	12/12/2002	LETTER	NAVY RESPONSE TO COMMENTS ON THE DRAFT PRAP	NAVY
4-CD2	435	N4152	64597	OFFTA	12/12/2002	LETTER	EPA RESPONSE TO COMMENTS	EPA
4-CD2	390	N4152	67477	OFFTA	6/1/2003	PUBLIC NOTICE	DRAFT FACT SHEET, SOIL REMOVAL	NAVY
4-CD2	420	N4152	67410	OFFTA	6/9/2003	PUBLIC NOTICE	EPA - PUBLIC INVOLVEMENT STATEMENT	EPA
4-CD2	389	N4152	67478	OFFTA	6/10/2003	LETTER	EPA COMMENTS DRAFT FACT SHEET, SOIL REMOVAL	EPA
4-CD2	388	N4152	67407	OFFTA	6/19/2003	LETTER	RIDEM COMMENTS, DRAFT FACT SHEET SOIL REMOVAL	RIDEM
4-CD2	419	N4152	C-NAVY-07-03- 1635W	OFFTA	7/8/2003	LETTER	RESPONSE TO COMMENTS, DRAFT FACT SHEET, SOIL REMOVAL	TTNUS
4-CD2	491	N4152	C-NAVY-07-03- 1634W	OFFTA	7/8/2003	PUBLIC NOTICE	FINAL FACT SHEET, SOIL REMOVAL	TTNUS
4-CD2	418	N4152	67411	OFFTA	7/9/2003	PUBLIC NOTICE	PUBLIC STATEMENT	RAB
4-CD2	417	N4152	C-NAVY-11-03- 1673W	OFFTA	11/12/2003	PUBLIC NOTICE	RESPONSIVENESS SUMMARY	TTNUS

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AB CD	ID No.	DOB No.	Doc. ID	Site	Date	Doc. Type	Description	Author
4-CD2	433	N4152	C-NAVY-01-04 1685W	OFFTA	1/29/2004	LETTER	SUMMARY OF DISCUSSION - NEXT STEP AT OFFTA	TTNUS
4-CD2	444	N7538	W5203290D	OFFTA	11/1/2003	PLAN	DRAFT WORK PLAN - SOIL PRE-DESIGN INVESTIGATION	TTNUS
4-CD2	443	N7538	67417	OFFTA	12/8/2003	LETTER	EPA COMMENTS, SOIL PDI WORK PLAN	EPA
4-CD2	442	N7538	67434	OFFTA	1/9/2004	LETTER	RIDEM COMMENTS, SOIL PDI WORK PLAN	RIDEM
4-CD2	410	N4152	W52043303D	OFFTA	1/1/2004	REPORT	DRAFT MOUND SUMMARY REPORT	TTNUS
4-CD2	411	N4152	W52043303DF	OFFTA	2/1/2004	REPORT	DRAFT FINAL MOUND SUMMARY REPORT	TTNUS
4-CD2	441	N7538	67435	OFFTA	3/9/2004	LETTER	NAVY RESPONSE TO COMMENTS, SOIL PDI WORK PLAN	NAVY
4-CD2	448	N4152	W5204308D	OFFTA	7/15/2004	REPORT	DRAFT SOIL PRE-DESIGN INVESTIGATION	TTNUS
4-CD2	447	N4152	67427	OFFTA	8/16/2004	LETTER	EPA COMMENTS ON THE DRAFT SOIL PDI REPORT	EPA
4-CD2	446	N4152	67422	OFFTA	9/2/2004	LETTER	RIDEM COMMENTS ON THE DRAFT SOIL PDI REPORT	RIDEM
4-CD2	413	N4152	67470	OFFTA	10/1/2004	LETTER	NAVY RESPONSE TO COMMENTS, DRAFT WORK PLAN, SED AND GW MON	NAVY
4-CD2	424	N4152	W5204314D	OFFTA	6/30/2004	REPORT	DRAFT ACTION MEMORANDUM - MOUND REMOVAL	TTNUS
4-CD2	423	N4152	67448	OFFTA	8/5/2004	LETTER	EPA COMMENTS TO THE DRAFT ACTION MEMO	EPA
4-CD2	422	N4152	C-NAVY-08-04 1739W	OFFTA	8/12/2004	LETTER	RESPONSE TO COMMENTS TO THE DRAFT ACTION MEMO	NAVY
4-CD2	488	N4152	W5204314F	OFFTA	8/13/2004	REPORT	FINAL ACTION MEMORANDUM, MOUND REMOVAL	NAVY
4-CD2	440	N4152	67441	OFFTA	7/30/2004	LETTER	EPA COMMENTS TO MOUND REMOVAL WORK PLAN	EPA
4-CD2	439	N4152	67426	OFFTA	8/12/2004	LETTER	NAVY RESPONSE TO EPA CORRESP 7/30/04	NAVY
4-CD2	434	N4152	W5203293D	OFFTA	6/30/2004	PLAN	DRAFT WORK PLAN - SEDIMENT AND GROUNDWATER MONITORING	TTNUS
4-CD2	416	N4152	C-NAVY-07-04 1726W	OFFTA	7/9/2004	PLAN	REVISION PAGES FOR DRAFT WORK PLAN	TTNUS
4-CD2	415	N4152	67447	OFFTA	8/5/2004	LETTER	EPA COMMENTS ON THE DRAFT WORK PLAN FOR SEDIMENT AND GW MON	EPA
4-CD2	414	N4152	67424	OFFTA	9/2/2004	LETTER	RIDEM COMMENTS ON THE DRAFT WORK PLAN, SED AND GW MON	RIDEM
4	00536	4152	W5204308F	OFFTA	4/29/2005	REPORT	FINAL SOIL PREDESIGN INVESTIGATION REPORT	TTNUS
4	00537	4152		OFFTA	12/23/2004	LETTER	CONSTRUCTABILITY REVIEW AND RESPONSE TO COMMENTS ON DRAFT SOIL PDI REPORT	NAVY
4	00538	1611		OFFTA	1/11/2005	LETTER	RESIDUAL RISK CALCULATIONS FOR SOIL REMOVAL ACTIONS	NAVY
4	00539	1611		OFFTA	1/25/2005	LETTER	EPA COMMENTS ON NAVY CORRESP 12/23/04	USEPA
4	00540	1611		OFFTA	2/8/2005	EMAIL	EPA COMMENTS ON NAVY CORRESP 1/11/05	USEPA
4	00541	1611		OFFTA	2/9/2005	MINUTES	FINAL MINUTES FROM CONFERENCE CALL 1/13/05	NAVY
4	00542	1611		OFFTA	2/10/2005	LETTER	RIDEM COMMENTS ON NAVY CORRESP 1/11/05	RIDEM

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NA Seq.	ID No.	AGE No.	Doc. No.	Site	Date	Doc. Type	Description	Author
4	00543	1611		OFFTA	2/17/2005	EMAIL	MINUTES FROM MEETING 2/3/05, RA SCHEDULE AND AGENDA FOR NEXT CONF CALL	NAVY
4	00544	1611		OFFTA	2/11/2005	EMAIL	RESPONSE TO QUESTIONS ON RISK ISSUES (RIDEM 2/10/05) AND FROM MEETING 2/3/05	NAVY
4	00545	1611		OFFTA	2/22/2005	LETTER	EPA COMMENTS TO NAVY CORRESP 12/23/04	USEPA
4	00546	1611		OFFTA	2/25/2005	MINUTES	DRAFT MINUTES FROM MEETING 2/22/06	NAVY
4	00547	1611		OFFTA	2/28/2005	LETTER	RIDEM COMMENTS ON NAVY CORRESP 2/11/05 AND 1/11/05	RIDEM
4	00548	1611		OFFTA	3/7/2005	LETTER	EPA COMMENTNS TO MINUTES OF MEETING 2/22/05	USEPA
4	00549	1611		OFFTA	3/9/2005	EMAIL	RIDEM AGREEMENT TO EXCAVATE SOIL	RIDEM
4	00550	1611	C-NAVY-03-05-1826W	OFFTA	3/16/2005	LETTER	SUPPLEMENTAL SOIL INVESTIGATION WORK PLAN	TINUS
4	00551	1611		OFFTA	3/23/2005	LETTER	EPA COMMENTS ON THE SUPPLEMENTAL SOIL INVESTIGATION WORK PLAN	USEPA
4	00552	1611		OFFTA	3/23/2005	LETTER	RIDEM COMMENTS ON THE SUPPLEMENTAL SOIL INVESTIGATION WORK PLAN	RIDEM
4	00553	1611		OFFTA	3/28/2005	LETTER	RESPONSE TO COMMENTS ON THE SUPPLEMENTAL SOIL INVESTIGATION WORK PLAN	NAVY
4	00554	1611		OFFTA	3/30/2005	EMAIL	EMAIL STRING RESOLVING BORING LOCATIONS FOR SUPPLEMENTAL SOIL INVESTIGATION WORK PLAN	USEPA
4	00555	1611		OFFTA	3/30/2005	LETTER	RIDEM COMMENTS ON LOCATIONS FOR SOIL BORINGS	RIDEM
4	00556	1611		OFFTA	4/5/2005	LETTER	EPA COMMENTS ON THE 30% DESIGN FOR SOIL REMOVAL AT OFFTA	USEPA
4	00557	1611		OFFTA	4/22/2005	LETTER	CLOSURE ON CORRESPONDENCES 1/25, 2/22, 2/28, 3/7, AND MEETING MINUTES 1/13, 2/3, AND 2/22/05	NAVY
4	00558	1611		OFFTA	5/16/2005	LETTER	COMMENTS TO MINUTES IN CORRESPONDENCE DATED 4/22/05	USEPA
4	00559	1611		OFFTA	5/16/2005	LETTER	COMMENTS TO CORRESP DATED 4/22/05 REGARDING THE CONSTRUCTABILITY REVIEW	USEPA
4	00560	1611		OFFTA	5/31/2005	LETTER	EPA COMMENTS TO THE FINAL SOIL PREDESIGN INVESTIGATION REPORT (APRIL 2005)	USEPA
4	00561	1611	W5205357D	OFFTA	8/25/2005	REPORT	DRAFT SUPPLEMENTAL SOIL INVESTIGATION	TINUS
4	00562	1611		OFFTA	9/19/2005	LETTER	COMMENTS TO SUPPLEMENTAL SOIL INVESTIGATION REPORT	USEPA
4	00563	1611		OFFTA	11/14/2005	LETTER	RESPONSE TO COMMENTS TO SUPPLEMENTAL SOIL INVESTIGATION	NAVY
4	00564	1611	W5205357F	OFFTA	11/30/2005	REPORT	FINAL SUPPLEMENTAL SOIL INVESTIGATION	TINUS

**NAVAL STATION NEWPORT  
ADMINISTRATIVE RECORD FILE - SITE 09**

Seq	ID#	OSP	Doc No	Site	Date	File Type	Description	Agency
4	00565	1611		OFFTA	12/8/2005	EMAIL	EPA CONCURRENCE WITH SUPPLEMENTAL SOIL INVESTIGATION	USEPA
4	00566	1611		OFFTA	11/26/2004	EMAIL	EPA CONCURRENCE WITH SEDIMENT AND GROUNDWATER MONITORING WORK PLAN	USEPA
4	00567	1611	W5205350D	OFFTA	7/27/2005	REPORT	DRAFT SEDIMENT AND GROUNDWATER MONITORING REPORT	TINUS
4	00568	1611		OFFTA	8/4/2005	LETTER	COMMENTS TO DRAFT SEDIMENT AND GROUNDWATER MONITORING REPORT	NOAA
4	00569	1611		OFFTA	9/7/2005	LETTER	COMMENTS TO DRAFT SEDIMENT AND GROUNDWATER MONITORING REPORT	USEPA
4	00570	1611		OFFTA	9/13/2005	LETTER	COMMENTS TO DRAFT SEDIMENT AND GROUNDWATER MONITORING REPORT	RIDEM
4	00571	1611		OFFTA	12/7/2005	LETTER	RESPONSE TO COMMENTS, DRAFT SEDIMENT AND GROUNDWATER MONITORING REPORT	NAVY
4	00572	1611		OFFTA	11/30/2005	LETTER	COMMENTS ON APPENDIX E OF THE DRAFT SEDIMENT AND GROUNDWATER MONITORING REPORT	RIDEM
4	00573	1611		OFFTA	12/22/2005	LETTER	COMMENTS ON NAVY CORRESP 12/7/05	USEPA
4	00574	1611		OFFTA	3/13/2006	LETTER	RESPONSE TO ADDITIONAL COMMENTS, DRAFT SEDIMENT AND GROUNDWATER MONITORING REPORT	NAVY
4	00575	1611	W5205350F	OFFTA	3/20/2006	REPORT	FINAL SEDIMENT AND GROUNDWATER MONITORING REPORT	TINUS
4	00576			OFFTA	12/8/2005	LETTER	RESPONSE TO COMMENTS ON DRAFT MOUND REMOVAL CLOSEOUT REPORT	NAVY
4	00577			OFFTA	12/15/2005	EMAIL	EPA CONCURRENCE WITH MOUND REMOVAL CLOSEOUT REPORT	USEPA
4	00578	5339	C-NAVY-03-06-2082W	OFFTA	3/17/2006	REPORT	CONCEPTUAL SITE MODEL FOR OFFTA	TINUS
4	00579	5339		OFFTA	4/13/2006	SLIDES	CLEANUP REVIEW TIGER TEAM RECOMMENDATIONS FOR THE OFFTA SITE, PRESENTATION SLIDES	NAVY
4	00580	5339		OFFTA	9/7/2005	LETTER	OFFTA CLARIFICATION ON FUTURE LAND USE	NAVY
4	00581	5339		OFFTA	5/25/2006	MINUTES	DRAFT MEETING MINUTES FROM THE TIGER TEAM REVIEW MEETING 4/13/06	NAVY

**NAVAL STATION NEWPORT  
ADMINISTRATIVE RECORD FILE - SITE 09**

AR Serial	ID#	Job No	Doc. No.	Site	Date	Doc. Type	Description	Author
4-CD2	352	NA	N061603	SWOS	6/16/2003	LETTER	NAVY LETTER RE NAVY PROPOSAL FOR NEW STUDY AREA	NAVY
4-CD2	351	N5152	67403	SWOS	6/24/2003	LETTER	EPA LETTER RE NAVY PROPOSAL FOR NEW STUDY AREA	EPA
4-CD2	499	NA	RI062703	SWOS	6/27/2003	LETTER	RIDEM LETTER RE NAVY PROPOSAL FOR NEW STUDY AREA	RIDEM
4-CD2	334	N5152	W5204306D	SWOS	9/1/2004	PLAN	DRAFT WORK PLAN - FOCUSED SITE INSPECTION	TTNUS
4-CD2	333	N5152	67471	SWOS	9/30/2004	LETTER	EPA COMMENTS, DRAFT SI WORK PLAN	EPA
4-CD2	332	N5152	67492	SWOS	10/15/2004	LETTER	RIDEM COMMENTS DRAFT SI WORK PLAN	RIDEM
4	00582			SWOS	3/18/2003	PLAN	WORK PLAN FOR TEST PIT EXCAVATION AT SWOS PARKING LOT	FOSTER WHEELER
4	00583			SWOS	3/18/2003	PLAN	HASP FOR TEST PIT EXCAVATION AT SWOS PARKING LOT	FOSTER WHEELER
4	00584			SWOS	7/21/2003	PLAN	SAMPLING PLAN TO SUPPORT RISK ASSESSMENT FOR WORKER EXPOSURE	FOSTER WHEELER
4	00585			SWOS	3/12/2004	REPORT	OCCUPATIONAL EXPOSURE ASSESSMENT FOR CONSTRUCTION AT SWOS SITE	FOSTER WHEELER
4	00586	5152		SWOS	11/24/2004	LETTER	RESPONSE TO COMMENTS DRAFT FOCUSED SI WORK PLAN, SWOS	NAVY
4	00587	5152		SWOS	12/15/2004	EMAIL	ACCEPTANCE OF RESPONSE TO COMMENTS	USEPA
4	00588	5152		SWOS	1/14/2005	LETTER	COMMENTS ON NAVY CORRESP 11/24/04	RIDEM
4	00589	5152		SWOS	2/9/2005	LETTER	RESPONSE TO COMMENTS, DRAFT FOCUSED SI WORK PLAN, SWOS	NAVY
4	00590	5152	W5204306F	SWOS	2/10/2005	WORK PLAN	REVISED WORK PLAN, FOCUSED SITE INVESTIGATION, SWOS	TINUS
4	00591	5339	W5205348D	SWOS	10/25/2005	REPORT	DRAFT FOCUSED SITE INVESTIGATION REPORT, SWOS	TINUS
4	00592	5339		SWOS	11/17/2005	LETTER	COMMENTS TO THE DRAFT SI REPORT	USEPA
4	00593	5339		SWOS	12/9/2005	LETTER	COMMENTS TO THE DRAFT SI REPORT	RIDEM
4	00594	5339		SWOS	3/3/2006	LETTER	RESPONSE TO COMMENTS, DRAFT FOCUSED SI REPORT, SWOS	NAVY
4	00595	5339	W5205348DF	SWOS	3/23/2006	REPORT	DRAFT FINAL FOCUSED SITE INVESTIGATION REPORT, SWOS	TINUS
4	00596	5339		SWOS	3/24/2006	LETTER	COMMENTS ON NAVY CORRESP 3/3/06	RIDEM
4	00597	5339		SWOS	4/12/2006	EMAIL	EPA CONCURRENCE ON DRAFT FINAL REPORT	USEPA



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**Attachment C**  
**Responsiveness Summary on Public and Other Comments to the Fact Sheet**

**RESPONSIVENESS SUMMARY  
FACT SHEET FOR SOIL REMOVAL ACTION  
OLD FIREFIGHTING TRAINING AREA  
NAVSTA NEWPORT, NEWPORT, RHODE ISLAND**

The purpose of the responsiveness summary is to document the Navy's responses to the comments and questions raised during the public comment period on the proposed removal action plan. The Navy considered all of the comments summarized in this section before selecting the remedy described in this Action Memorandum.

**BACKGROUND ON COMMUNITY INVOLVEMENT AND CONCERNS**

In 1996 the Navy established a citizen's advisory committee called a Restoration Advisory Board (RAB) to assist the Navy in addressing Installation Restoration (IR) program sites, such as the Old Fire Fighting Training Area (OFFTA). The RAB meets monthly at NAVSTA Newport to discuss planned and ongoing activities at the IR sites on the base. The cleanup alternatives for site soil were discussed at RAB meetings at various times during the development of the Feasibility Study (FS). Input provided by the RAB was considered during development of the FS, the Fact Sheet describing the proposed soil cleanup, and the Action Memorandum.

The FS for the OFFTA site was made available to the public in September and the Fact Sheet describing the proposed soil cleanup was made available in July 2003. They can be found in the information repositories maintained for the site at the Middletown, Newport, and Portsmouth, Rhode Island Public Libraries.

The notice of availability for the Fact Sheet describing the proposed soil cleanup was published in the Newport Daily News and the Providence Journal – East Bay Edition on July 8, 11, and 15, 2003. A public comment period on the proposed cleanup plan lasted from July 16, 2003 to August 15, 2003. An informational open house and meeting was held on July 16, 2003 to present the proposed soil cleanup plan to the public and to solicit comments on the plan. Representatives from the Navy, EPA, and the RIDEM were available at the meeting to discuss the public's questions and concerns about the site. A representative from the Navy was present at the hearing to record the public's formal comments and comment cards were available for people to provide formal written comments.

**COMMENTS RECEIVED DURING THE PUBLIC COMMENT PERIOD AND THE NAVY'S RESPONSE TO THOSE COMMENTS**

Formal comments on the proposed cleanup plan were received from eleven individuals or groups during the public comment period. The rest of this section presents the comments received and provides the Navy's responses to those comments.

**Name:**

Ms. Claudette Weissinger

**Comment:**

Highly support the offshore and on shore clean up be done at the same time. (for obvious reasons).

**Navy's Response:**

The Navy believes that the sediment data collected to date are inconclusive in demonstrating that an active remediation of the offshore sediment is warranted. The Navy believes that conducting an aggressive offshore sediment clean up would be more harmful to the marine habitat and marine life than taking no action. (There is no identified human health risk from the offshore sediments.) RIDEM and EPA disagree with the Navy's conclusions about the need for active remediation of the sediment, but have agreed to postpone the final offshore decision. The Navy will collect additional offshore data and further evaluate the extent of any additional actions needed for sediment. Rather than delay the soil cleanup until additional data are collected, evaluated and agreement is reached on the appropriate action for sediment, the Navy believes it is in the best interest of the public, and the environment, to move forward with the onshore soil removal action now.

**Name:**

Mr. Christopher Burnett  
President,  
Spinblade Energy LLC  
Portsmouth, RI

**Comment:**

Has the Navy considered the merits of installing 2 to 3 wind turbines at the recovered site for the purpose of generating clean, carbon free renewable electric power for the use of Navy Station Newport. Such an initiative could help to take a negative toxic removal into a positive renewable energy projects. The U.S. Navy would not have to pay for such an initiative but could lease 3 locations (approximately 28 feet in diameter) to mount modern 1.5 mw turbines. Based on local onemometer data these turbines could generate 9.0 mwh of power annually. It could generate additional income to the Navy and reduce the base dependence on easily interrupted commercial power.

(The commentor attached) copies of relevant DOD directives on renewable energy. The proposed turbines would not preclude in any way the use of the land for recreational or other purposes. The State of RI can provide subsidy from RI Renewable Funds. Potential income - \$50,000 to \$75,000 per year for 4.5 mw. Excellent welfare and rec funds. Provide free power for streetlights for the Navy.

**Navy's Response:**

The installation of wind turbines falls outside the scope and jurisdiction of the Navy's Installation Restoration Program, under which waste site investigation and remediation are performed. The Public Works Officer for NAVSTA Newport is responsible for managing real estate property, and energy initiatives and conservation. The NAVSTA Environmental staff will bring to the attention of the Public Works Officer this concept for his awareness and future considerations on any area of NAVSTA property.

**Name:**

Ms. Mary Philcox  
Aquidneck Island Citizens Advisory Board

**Comments:**

Soil Cleanup:

1. Storm Drain System – The existing storm drain system has been implicated as a potential source of PAH contaminants either through direct runoff or as a migration pathway. As the existing system is being removed during excavation, this is an opportunity to eliminate one of the variables associated with the sediment contamination. How does the Navy propose to address storm water conveyances and discharges at this site after the soil cleanup is completed?

**Navy's Response:**

The existing storm drainage system is currently being upgraded to include a contaminant capture system, and other upgrades will be considered as a part of the proposed construction clean-up for the site.

2. Truck Traffic – Request that the Navy minimize the impact of truck traffic on the local community as well as people along the routes to the disposal sites. For example, truck arrival and departure times could be limited to reduce noise and traffic during early morning and late evening hours, loads should be covered and weight restrictions should be observed.

**Navy's Response:**

The Navy will make efforts to minimize the impacts of truck traffic on the community through the means described above as well as others such as routing trucks to limit travel on small secondary roads to the extent possible. The design document for the soil cleanup will address these issues in detail.

3. The Navy, USEPA, and RIDEM have not yet reached an agreement on the proposed remedy for the sediments. As it is possible that a sediment cleanup could be conducted concurrently with the soil cleanup, this issue should be resolved as soon as possible. What is the process for reaching agreement? What type of time frame is anticipated?

**Navy's Response:**

The Navy is in the process of completing the Draft Work Plan for a supplemental monitoring to collect and evaluate additional data to determine the extent of any remedial actions needed for offshore sediment. USEPA and RIDEM must review and approve the draft work plan before the investigation is conducted. After the work plan is approved, the Navy will conduct the investigation and incorporate its findings into a revised Feasibility Study. USEPA and RIDEM will review the revised FS and provide comments or concurrence. The time frame for reaching agreement is dependent on the length of time it takes to prepare the draft documents, the length of time for all parties to review, comment and agree or reach consensus on each document discussed above. Our goal is to reach agreement on the monitoring work plan during the winter season so that sediment sampling may begin in the spring.

4. The Navy has indicated that it does not believe that there is a significant cost savings if soil removal and sediment removal actions occur concurrently. What is the estimated difference in cost between conducting the soil and sediment removal concurrently versus separately?

**Navy's Response:**

The costs for performing the soil and the sediment removal actions have been estimated separately, because different equipment is required, and logistics may require one be performed either before or after the other. However, it is believed that some of the administrative costs (contracting actions, project management, etc.) would be shared between the two actions if they were conducted together. Using the estimates recently published, sharing these tasks could result in a cost savings of approximately \$58,000. It is also possible that some savings could be realized for waste disposal per ton, if both sediment and soils are removed together; however, this is unknown at this time. Basically if both the soil and sediments removal actions are combined the administrative cost saving is minimal when compared to the overall project cost estimated in the FS.

5. Phase II pre-design sampling at sediment station SD-410 yielded results that were an order of magnitude lower than the results obtained during the Feasibility Study (FS) sampling. The FS sample result was above the preliminary remediation goal (PRG) but the Pre-design sample result was less than the PRG. What method will the Navy use to determine whether the contaminant levels in the sediment are safe if the results cannot be directly compared to the PRG due to variability? Does the Navy have an explanation for the variability in the test results? Does the Navy plan to conduct further studies of the behavior of the contaminants in the sediment? Will additional modeling of sediment stability and other physical, biological and chemical processes be performed? What is the timeframe for any planned studies and will the work be completed prior to the proposed soil removal?

**Navy's Response:**

The Navy is still evaluating the conditions at the site to determine the extent of any remedial actions needed for offshore sediment. These evaluations include reevaluation of existing data, as well as collection of new data before and after soil removal actions. The variability described above is one factor that contributed to Navy's conclusion that active remediation of the sediments is not warranted. Variability can be related to the nature of ocean sediments (moving with tides and storm events) and with what is known as heterogeneity. The continued monitoring effort will go on through 2004 and 2005 (contingent on work plan approval), while the soil removal is plan in two stages. The first stage is to remove the known soil mounds on site in 2004. For stage one, the exact amount of soil needing removal is evident since it is well known that the soil mounds were created when the original fire fighting training operation were terminated. The larger of the two removal actions the second stage will remove the subsurface soil contamination in 2005. .

6. The Navy has proposed that the sediment be monitored after the soil removal action is completed to see if cleanup goals will eventually be reached as an alternative to concurrent soil and sediment removal. How does the Navy propose to determine whether cleanup goals have been met? What would be the scope of the sampling (frequency, locations, parameters)? What levels/trends would be considered to meet remediation goals?

**Navy's Response:**

Sediment results from current and past sampling efforts continue to be compared with remediation goals provided in the Feasibility Study Report (September 2002). Additionally, these results are shared with USEPA and RIDEM for continuing discussions on whether these sediments will require removal. The Sediment and Groundwater Monitoring Draft Work Plan soon to be released for this site will address the scope of the sampling efforts. The findings will be used to make a determination of what follow-on actions are necessary.

**Name:**

Mr. David W. Brown

**Comments:**

I appreciate the facts sheets, displays, briefings and study reports that the Navy has provided on OFFTA over the past two years. It is good that NSN intends to go ahead with this part of the OFFTA cleanup as soon as possible. But I have the following concerns:

1. In using just the three criteria and choosing Alt. 3 (removal and disposal) over Alt. 2 (removal, treatment, backfill), the Navy has ignored the negative long-term community and area effects ("external social costs").

The Navy has chosen the cheapest way to meet cleanup standards from the standpoint of its own "out-of-pocket" costs, but it has not included indirect costs to the public, both tangible and

intangible. From the community externalities standpoint, Alt. 3 is likely to be worse than Alt. 2 in at least the following ways:

- a) More exposure of people along the truck routes to dust, engine emissions, and noise from hauling more tons of contaminated stuff away.
- b) More wear-and-tear on the roads and bridges that the trucks use.
- c) Quicker fill-up of the landfills where the stuff is dumped, and needs for our region to find other, more costly ways to dispose of waste sooner.
- d) Possible need eventually to clean up more OFFTA material at the dumping sites, if people-intensive land uses there are eventually sought.
- e) Possible added human health and ecological risks near the dumping sites from having more OFFTA material there.

The only "social" pluses I can think of for Alt. 3 are that f) more work for local truckers and drivers will be generated and g) by having a few months' quicker access to OFFTA, NSN may generate a few more jobs sooner.

An argument that you have used "standard procedures" won't hold. As good environmental economics and benefit-cost references will tell you, sound comparisons will "internalize" such externalities into the analysis. Or at least, a tradeoff framework should be used to weight the Navy's costs and benefits against these other important society-wide considerations.

To put it another way, I don't think that citizens here want to be party to messing up the life qualities, safety and environment of people elsewhere, just to clean up our own backyard the cheapest way. So I am calling for the above kinds of "external" issues and concerns to be given full consideration by the Navy, regulatory agencies and others involved before choosing Alt. 3.

#### **Navy's Response:**

The Navy considers these types of indirect "social" costs to the extent possible in evaluating remedial options. The Navy agrees that the external social cost concerns mentioned above are valid for any removal action project that removes contaminated soil from a site and transports it to a permitted landfill disposal facility, and as such are taken into consideration when doing comparisons. However, fiscal reality dictates that it must also give great weight to the bottom line "out-of-pocket" costs in order to maximize the environmental cleanup benefits across all of the Navy sites. The Navy has a finite budget to divide among the many needed investigation and remediation projects under its jurisdiction. Therefore every extra dollar spent on one project is a dollar diverted from another project. The social costs of alternative 3 identified above must be weighed not simply against the direct and indirect costs of alternative 2, but also against the human and environmental costs of not using the \$5,000,000 cost difference to fund the cleanup of another site.

#### **2. Why have the estimated cost and time advantages of Alt. 3 become greater than before?**

Earlier drafts of remedial alternatives talked in terms of \$8 million for Alt. 3 vs. \$12 million for Alt. 2. Now it's \$9 million vs. \$14 million. And even more striking, while it was formerly 4-6 months vs. 6-8 months, now it's 6 months vs. 2 years. What justified these big comparative changes from earlier estimates?

#### **Navy's Response:**

The alternatives and associated estimates provided in the Draft Feasibility Study were revised based on review of the draft document. This is not uncommon, and indeed the purpose of the peer review of the documents, to assure that all the efforts associated with the projects have been properly thought out.

Several factors contributed to the increased cost estimates. Costs for both alternatives increased because the conversion factor for the number of tons per cubic yard of soil to be removed was revised

from approximately 1.2 to 1.5, increasing the estimated tonnage to be removed and increasing all costs estimated on unit-tons (transport costs, disposal costs, backfill costs, etc.). Additionally, estimated sampling costs increased for both alternatives because the number of confirmation samples to be collected after excavation was increased, and the frequency of testing soil to be disposed of was increased. For alternative 2, additional costs were included for more post-treatment confirmation analysis, and pilot testing of the treatment process.

The schedules for both Alternatives 2 and 3 were revised to be more complete. Both schedules were revised to include time for mobilization and demobilization, instead of only including the earthmoving operations. The schedule for alternative 2 was revised to include pilot testing efforts, and to increase the time for treatment on site because the treatment time in the draft schedule was judged to be too short to achieve the cleanup goals.

3. If you go ahead with Alt. 3,
  - a) Can you demonstrate that the Navy is taking precautions to minimize negative social (community and area) impacts? E.g. why not barge the stuff away instead of trucking it?
  - b) If there some social damages (like medical problems from truck pollution or ruined roads), is the Navy prepared to compensate for the damages without hassle or delay?

**Navy's Response:**

During the design of the soil cleanup, the Navy will evaluate various means of minimizing potential impacts to the surrounding community and environment. Alternate transportation methods, transportation routes, hauling schedules, covered and sealed hauling containers, dust control methods; and air monitoring will be evaluated to develop an implementable, cost effective plan that minimizes negative impacts to the community and environment.

The Navy has conducted remedial actions of this scale at Naval Station Newport and other bases taking appropriate precautions to not damage people's health or the local infrastructure. The Navy anticipates that the proposed cleanup can be carried out in a safe manner and with minimal disruptive activities to the surrounding community. If the Navy causes any damage as a result of the cleanup, the Navy will work with the community to remedy the damage.

4. Re the off-shore sediment, I'm disappointed that the Navy isn't going ahead with the off-shore cleanup now. But it's heartening to learn that the Navy wants to reach agreement with EPA and RIDEM in coming months. What are the remaining issues, who will take the next negotiating step, and when?

**Navy's Response:**

The Navy does not believe that remedial action is warranted for the offshore sediment because the current data does not consistently show a connection between the contaminants in the sediment and the contaminants on the site. The sediment contaminants appear to be more closely related to urban runoff and storm water pollutants than the oils that are present in the soil at the site. RIDEM and EPA disagree with the Navy's conclusions about the need for active remediation of the sediment, but have agreed to postpone the final offshore decision. The Navy will collect additional offshore data and further evaluate the extent of any additional actions needed for sediment. The Navy is scheduling meetings with the regulators to continue to discuss the technical differences. The next steps are completing and reaching agreement on future monitoring efforts.

5. Re the groundwater, can't the Navy do better than just monitor before/after outflows? Why not make improvements in surface and subsurface drainage for that whole part of the Island as an integral part of the soil cleanup (e.g., drainage from the new "temporary" parking lot on part of OFFTA)?

**Navy's Response:**

The Navy has installed upgrades including pollutant capture system to the storm drain system that discharges to the north portion of the site. Additional improvements are being considered for the second storm drain system at the site, and would be included in the second stage soil removal action.

**Nam :**

Ms. Nathaya Johnson

**Comment:**

This is an issue that shouldn't even be talked about anymore! This project should have started and been in the works a long time ago. Now they're talking about more delays? More delays to begin to right the wrong to the environment? Delays such as that tend to contradict the very standards which certain organizations were set up for originally. These organizations were set up to take action, not bog down and delay. That having been said, let me just say that we'd better start the cleanup of this project in order to better the environment.

**Navy's Response:**

The Navy supports starting the cleanups this fiscal year. With that in mind the Navy scheduled the soil removal action in two stages. The first stage is the soil mound removals in 2004 and the second stage is the removal of the contaminated subsurface soil in 2005.

**Name:**

Mr. Michael Anderson

**Comment:**

I say why spend more money on further testing. Enough testing has already been done! They know there are "hot spots". We all know about "hot spots". They won't go away no matter how long we delay this thing, obviously. So waiting any longer is definitely not the answer. Let's let the Navy do what they propose. Their proposal is right and just. Their intent mean this important work will start soon.

**Navy's Response:**

Your comment has been added to the responsiveness summary, thank you.

**Name:**

Mr. Erasmo Garcia

**Comment:**

I think the Navy's ideas about cleaning up this site is definitely a good proposal and the right thing to do rather than waste further time on doing nothing. The longer this is allowed to go on for, the more time is ultimately wasted resulting in the environment being unimproved longer. Let's stop all the red tape and start cleaning up this land!

**Navy's Response:**

Your comment has been added to the responsiveness summary, thank you.

**Name:**

Mr. John Anderson

**Comment:**

The Navy should be allowed to begin a cleanup project without much further ado. These considerations have been going on way too long and too much government money is being wasted as it is! The Navy's proposal would mean an environmental improvement ultimately, therefore, there should be no entity getting in the way of that mission. There is no good sound reason not to begin hands-on work to rectify this problem that has apparently been allowed to go on long enough!



**Navy's Response:**

Your comment has been added to the responsiveness summary, thank you.

**Name:**

Mr. William Weikert

**Comment:**

Plain and simple. Let's begin the work and solve any problems that may come up as we go along. We know what we're in for here. Every project has potential problems unforeseen that may arise. That's no excuse to not clean up the environment. We as taxpayers deserve to see our hard-earned tax money spent on solving problems, cleaning up the planet, and good causes as such. So let's get to it and do it. Wasting our money on red-taped delays is not the way to solve issues. We need to take action, begin the work, get it done and move on to the many other important issues that concern us all in our daily lives.

**Navy's Response:**

The Navy supports starting the cleanups this fiscal year. With that in mind the Navy scheduled the soil removal action in two stages. The first stage is the soil mound removals in 2004 and the second stage is the removal of the contaminated subsurface soil in 2005.

**Name:**

Mr. Manual Marquis

**Comment:**

I am well aware of this proposal through my attendance at the rab meetings. I am very much in favor of the Navy's proposal for remediation to commence as soon as possible.

**Navy's Response:**

Your comment has been added to the responsiveness summary, thank you.

**Name:**

Mr. Victor Peabody

**Comment:**

The way I see it is, why wait any longer, why spend more money than we have to, why procrastinate the cleanup of this problem? Let's stop dilly-dallying and start taking action. No action is not better than taking physical steps to rectify the situation here. We could begin the work and then, if we ran into a problem, solve the problems as we go along instead of anticipating a problem that may not exist therefore delaying the important work in the meantime.

**Navy's Response:**

Your comment has been added to the responsiveness summary, thank you.